



DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

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Subject: VISIT TO ISLANDS BETWEEN ONSLOW AND EXMOUTH
18-21 APRIL 1997

Dear Steve

Here is a summary of the information that I gathered at the islands that we visited in mid April 1997. I hope that this is useful to you. Please feel free to pass it on to the others in the team. I have also included some information on the Muiron Islands and the marine reserve at South Muiron Island. This is actually a Fisheries Department reserve for the protection of Potato Cod and is not managed by CALM.

Samples of vegetation were collected on all islands although this was limited to species that were not readily identified on the spot. Vegetation patterns were similar on nearly all islands visited, with a sandy beach leading up into a vegetated margin and then sand dunes, which were often very steep. The margin contained scattered *Spinifex longifolius* and often *Scaevola crassifolia*. There were also *Salsola kali* bushes and some small herbs in this area. The dune face was often covered in similar vegetation to the margin, although *Acacia bivenosa* and *Acacia coriacea* were also often present. Small succulents and herbs were also present in this area. Once over the primary dune, many islands had a flat area that covered the remainder of the island. This was often dominated by the *Acacia* species with the addition of *Sarcostemma australe*, grasses (either or both *Eulalia fulva* and *Cenchrus ciliaris* (buffel grass - a weed)) and ground covers such as *Commicarpus australis* and *Tribulus occidentalis*. Tables 1 and 2 (following) list plant and bird species seen at each island.

ASHBURTON ISLAND

Visited on 18 April 1997. Turtle nesting was evident on the southeast to southern beaches. Fresh rat tracks were seen in the sand along the strand line and burrows/diggings were evident in the centre of the island. Five seabird species were seen, including two Australian Pelicans. Twelve plant species were recorded. There was evidence of a campfire on the south side in a valley with clam and oyster shells in abundance around it. There were also numerous cans and bottles. The charter boat operators indicated that the island is used for camping by people from Onslow

Photos 3 & 2 - island from boat looking west

1 - vegetation in centre of island

TORTOISE ISLAND

Visited on 18 April 1997. This island has a sandy/coral rubble spit on the south end. Six species of bird were observed. Thirteen plant species were recorded. There were three old rusty pipes sticking up out of ground on top of the island, approximately 20 cm in diameter,

50 cm high and 70 cm deep. The island is shaped like a tortoise, with a high domed centre, hence the name!!

Photos 25 - whole island looking north
24 - vegetation on top of island

LOCKER ISLAND

Visited on 18 April 1997. Evidence of turtle nesting on the south western and southern beaches. Five bird species were observed, including an adult and a first year juvenile White-breasted Sea Eagle. Shearwater burrows were also present. Thirteen plant species were recorded.

Photos 23,22,21 - panorama of island looking west
20 vegetation on island

OBSERVATION ISLAND

Visited on 18 April 1997, late in the afternoon. Two bird species were seen and there were scattered shearwater burrows in the centre of the island. The majority of the birds were Silver Gulls coming in to roost for the night. The remains of some sort of installation was also present with a rusty sign (no visible writing), timbers, metal and fabric on the ground. Thirteen plant species were recorded.

Photos 19 - island looking west
18 - vegetation and remains of installation

FLY ISLAND

Visited on 19 April 1997. Six species of bird were seen and shearwater burrows were present under *Sarcostemma* bushes. There was a dog skull on the dune face (collected) and the rest of skeleton was bleached and partly buried nearby. Sixteen plant species were recorded.

Photos 17 - island looking north
16 - vegetation in centre of island
15 - comparison between buffel and *Eulalia*

EVA ISLAND (VICTOR ISLAND)

Visited on 19 April 1997. Four species of birds were observed. A Crested Tern colony with eggs and a few newly hatched chicks on sand, with at least 600 nests, was present on the edge of the dunes on the northern side. Ten plant species were recorded.

Photos 14 - island looking south with Y Island in background
13 - closeup of egg
12 - tern colony with eggs
11 - terns on nests
10 - island vegetation

Y ISLAND

Visited on 19 April 1997. Six species of birds were observed. There was a colony of nesting Silver Gulls, with scrapes under *S. longifolius* with and without eggs, eggs large and mottled green, 1-3 per nest, with approximately 300-500 pairs. Twelve plant species were recorded. There were lots of footprints and a fireplace on the eastern end of island. A lighthouse is located on top of island. There were bits of junk lying around it and lots of dead terns underneath. Two *Gemmatophora gilberti* were observed skipping around the base. A wrecked prawn trawler is located on the west side. It had the number F196 on it.

Photos 9 - closeup of eggs
8 - vegetation, looking north

SUNDAY ISLAND

Visited on 19 April 1997. Four species of birds were seen. A Roseate Tern colony, with eggs in scrapes, bluey/green and mottled, with approximately 2000 pairs was located on the southern side of the island. Silver gulls were also nesting, approximately 50 pairs with eggs in scrapes under *S. longifolius*. There were 5 eagle nests in the centre of island, two with signs of recent use (dead birds), one of which had two very freshly dead sea gulls in it. *Gemmatophora gilberti* were also seen. Twelve plant species were recorded.

Photos 7 - island looking north

6 - vegetation

SOUTH MUIRON ISLAND

Two sites were visited on this island on 19 April 1997, the southeast corner and the large beach on the northern end. Turtle nesting was evident on the southern beaches, which had very high and steep dunes. Shearwater burrows were present behind the primary dune in this area. The large beach on the northern end of the island had a lot of evidence of recreational visitors. There were large numbers of footprints and some debris on the beach including a tripod structure at the western end. *Gemmatophora gilberti* were observed at this site. Total numbers of bird and plant species were not recorded as only a portion of the island was visited. However, birds seen included Australian Pelican, Crested Tern, Silver Gull, White-breasted Sea Eagle and Osprey.

PEAK ISLAND

Visited on 19 April 1997 just before sunset. We could not actually land on this island due to the swell so we drove around it in the dinghy. Two sea eagles and an eagle nest were seen. The island had very steep dunes and appeared to have a flat top. The vegetation appeared to be typical of that on other islands in the area. Previous records (12 February 1997) indicate that the vegetation is dominated by a prostrate form of *Acacia bivenosa*, with *Salsola kali* and *Spinifex longifolius*. This record also indicates that Bridled Terns were nesting on the island, approximately 20-30 pairs.

Photos 5 - island looking north

SERRURIER (LONG) ISLAND

Visited on 20 April 1997, shortly after sunrise. I walked around the southern end of island from the narrow neck. Twenty-four plant species were recorded. Seven species of birds were seen, including numerous Silvereyes and White-breasted Woodswallows. Shearwater burrows were also common in the inland parts. There were numerous campsites on the beach on the western side, with evidence of fires and quite a lot of rubbish. A campsite was present behind the dunes just near the narrow neck with a 44 gallon drum nearly filled with cans, driftwood and evidence of fires. There were a lot of footprints, clam shells, a collection of shells (cowries etc) and sponges, and large dense bones scattered around. There were also the remains of a pit toilet near the nature reserve sign on the southern end of the western beach. The four nature reserve signs that I saw, need painting and the logo and symbols need replacing. All are very faint and many are actually unreadable.

FLAT ISLAND

Visited on 20 April 1997. Turtle nesting was evident on the sandy spit. Eight bird species were observed. There was a large Crested Tern colony on the northern end of the island with small chicks, and approximately 3000-4000 pairs. Fifteen plant species were recorded. Previous records (12 February 1997) indicate that Bridled Terns also use this island for nesting. There were approximately 100-200 pairs present at the time of the visit.

Photos 4 - island looking west
3 - Crested Tern chick

ROUND ISLAND

Visited on 20 April 1997. The vegetation on this island was very green and eight species were recorded. Five species of birds were seen, including six Pied Cormorants. There was evidence of an old seabird colony and a number of eggs (shells) were collected to aid in identification. The shells were broken in such a way as to indicate that hatching had occurred. The size of the shells indicate that they are Crested Tern eggs, however recent records (12 February 1997) indicate that Bridled Terns were nesting on the island, although Crested Terns were also seen.

TABLE ISLAND

Visited on 20 April 1997. Vegetation was sparse on top of this island and nine plant species were recorded. Seven bird species were seen, including Crested Terns and Roseate Terns. A dugong skeleton, with some skin still remaining, was present just above high tide line. I collected the tusks to send to RITP for aging.

BESSIERES (ANCHOR) ISLAND

Visited on 20 April 1997. Ten bird species were observed and shearwater burrows were present in the centre of the island under *Sarcostemma* bushes. Part of a crane (very rusty) was present on rocks on the eastern side. *Ctenopus saxatilis* were seen scooting around. There was a lighthouse on top of the island, with small patches of buffel grass around it. A total of twenty two plant species were recorded.

Photo 2 - island looking west

DIRECTION ISLAND

Visited on 21 April 1997. Seven species of bird were observed including two adult White-breasted Sea Eagles and a juvenile. Fifteen plant species were recorded, including at least three *Acacia*, although buffel grass is present all through the centre of the island. The island has a fishing hut on it, with a water tank and dinghy, run by Mackerel Islands resort (also have a facility on Thevenard Island). There were shells around hut, mainly baler and oyster shells. There was also an old communications tower on the western end, with a standard survey mark near it.

	Ashburton Island	Tortoise Island	Locker Island	Observation Island	Fly Island	Eva Island	Y Island	Sunday Island
165 PAPILIONACEAE								
<i>Canavalia maritima</i>						x		
<i>Rhynchosia minima</i>								
173 ZYGOPHYLLACEAE								
<i>Tribalis occidentalis</i>				x	x		x	
<i>Zygophyllum aurantiacum</i>								
185 EUPHORBIACEAE								
<i>Euphorbia</i> sp.	x	x		x			x	
<i>Euphorbia</i> sp. (milky succulent)				x	x		x	
221 MALVACEAE								
<i>Sida fibulifera</i>				x				
223 STERCULIACEAE								
<i>Melhania oblongifolia</i>								
305 ASCELPIDACEAE								
<i>Sarcostemma australe</i>					x	x		
307 CONVOLVULACEAE								
<i>Ipomoea pes-caprae</i>	x	x	x					x
341 GOODENIACEAE								
<i>Scaevola spinescens</i>	x							
<i>Scaevola crassifolia</i>			x		x		x	
345 ASTERACEAE								
<i>Argemone cunninghamii</i> (grey Ptilotis)	x	x	x	x	x	x	x	x
<i>Launea sarmentosa</i> (beach vine)				x		x		x
<i>Olearia dampieri</i>	x							
<i>Pterocaulon sphacelatum</i>					x			
<i>Senecio laetus</i>					x			x
<i>Vitidina</i> sp.	x	x						
TOTAL NO OF SPECIES	12	13	13	13	16	10	12	12

TABLE 1: PLANT SPECIES ON ISLANDS BETWEEN ONSLOW AND EXMOUTH (continued)

Species Name	Serrurier Island	Flat Island	Round Island	Table Island	Bessieres Island	Direction Island
31 POACEAE						
<i>Cenchrus ciliaris</i>	x				x	x
<i>Eulalia aurea</i>	x	x			x	x
<i>Spinifex longifolius</i>	x	x	x	x	x	x
<i>Triodia epactia</i>						
<i>Triodia</i> sp.		x				x
54F ANATHERICACEAE						
<i>Corynotheca sexuosa</i>	x					
105CHENOPODIACEAE						
<i>Atriplex isatidea</i> (silverleaf)	x	x		x	x	
<i>Rhagodia eremaea</i>	x				x	x
<i>Rhagodia priessii</i> subsp. <i>obovata</i>					x	
<i>Salsola kali</i>	x	x		x	x	x
<i>Threlkeldia diffusa</i>	x	x	x	x	x	
106 AMARANTHACEAE						
<i>Amaranthus mitchelli</i>			x	x		
<i>Phytolus villosiflorus</i>	x					
107 NYCTAGINACEAE						
<i>Commicarpus australis</i>	x	x	x			x
<i>Commicarpus</i>						
110 AIZOACEAE						
<i>Carpobrotus</i> (pigface)	x	x	x	x	x	
111 PORTULACACEAE						
<i>Portulaca intraterrane</i>	x	x	x	x	x	
131 LAURACEAE						
<i>Cassytha ? aurea</i> var. <i>aurea</i>						
137A CAPPARACEAE						
<i>Capparis spinosa</i>						
<i>Cleome viscosa</i>						
163 MIMOSACEAE						
<i>Acacia bivenosa</i>				x	x	
<i>Acacia coriacea</i>	x	x			x	x
<i>Acacia ligulata</i>	x	x			x	x
<i>Acacia scleroperma</i>					x	

	Serrurier Island	Flat Island	Round Island	Table Island	Bessieres Island	Direction Island
165 PAPILIONACEAE						
<i>Canavalia maritima</i>						
<i>Rhynchosia minima</i>	x					
173 ZYGOPHYLLACEAE						
<i>Tribulus occidentalis</i>	x		x		x	
<i>Zygophyllum aurantiacum</i>					x	
185 EUPHORBIACEAE						
<i>Euphorbia</i> sp.						
<i>Euphorbia</i> sp. (milky succulent)	x	x			x	x
221 MALVACEAE						
<i>Sida fibulifera</i>						
223 STERCULIACEAE						
<i>Melhania oblongifolia</i>	x					
305 ASCLEPIDACEAE						
<i>Sarcostemma australe</i>	x				x	
307 CONVULVULACEAE						
<i>Ipomoea pes-caprae</i>	x	x			x	x
341 GOODENIACEAE						
<i>Scaevola spinescens</i>						
<i>Scaevola crassifolia</i>	x	x			x	x
345 ASTERACEAE						
<i>Antianthus cunninghamii</i> (grey <i>Ptilotis</i>)	x	x	x	x	x	x
<i>Launea sarmentosa</i> (beach vine)	x				x	
<i>Olearia dampieri</i>						
<i>Pterocaulon sphacelatum</i>						
<i>Senecio laevis</i>	x					
<i>Vitidinia</i> sp.						
TOTAL NO OF SPECIES	24	15	8	9	22	14

		Ashburton Island	Tortoise Island	Locker Island	Observation Island	Fly Island	Eva Island	Y Island	Sunday Island
MOTACILLIDAE									
<i>Anthus novaeseelandiae</i>	Pipit								
ZOSTEROPIDAE									
<i>Zosterops lateralis/tutea?</i>	Silvereye			lots	1	1			
COCORACIDAE									
<i>Artamus leucorhynchus</i>	White-Breasted Woodswallow								
TOTAL NO OF SPECIES		5	6	6	3	7	4	6	4

		South Muiron Island	Peak Island	Serrurier Island	Flat Island	Round Island	Table Island	Bessieres Island	Direction Island
MOTACILLIDAE									
<i>Anthus novaeseelandiae</i>	Pipit	2						1	1
ZOSTEROPIIDAE									
<i>Zosterops lateralis/lutea?</i>	Silvereye			numerous					
COCORACIDAE									
<i>Artamus leucorhynchus</i>	White-breasted Woodswallow			numerous	4			9	
TOTAL NO OF SPECIES		incomplete	2	8	8	5	7	11	7